



Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-captioned patent application:

Listing of Claims:

Claim 1. (Currently Amended) An optical connector comprising a first connector element holding a first optical fiber and a second connector element holding a second optical fiber, the first and the second connector elements cooperating with each other to obtain a connected state in which exposed longitudinal ends of the first and the second optical fibers are brought into contact with each other, wherein the first optical fiber comprising:

a long fiber portion having longitudinal ends;

a short fiber portion having a polymer layer on its outer peripheral surface to have a higher breakage resistance than the long fiber portion and having longitudinal ends; and

a fusion connection portion where one of the longitudinal ends of the short fiber is fused to one of the longitudinal ends of the long fiber portion, another of the longitudinal ends of the short fiber portion being exposed to serve as the exposed longitudinal end of the first optical fiber;

wherein the first connector element comprises:

a main body;

a clamp portion holding the first optical fiber; and

a cover fixing the clamp portion to the main body, wherein the fusion connection portion between the long fiber portion and the short fiber portion is held within the clamp portion, and

wherein the short fiber portion is bent by the second optical fiber in a the connected state of the optical connector and is brought into contact with the second optical fiber by the resilient force of the short fiber portion.

Claim 2. (Canceled).

Claim 3. (Previously Presented) An optical connector according to claim 1, wherein the clamp portion has an opening portion, the fusion bonding portion is disposed in the opening portion.

Claim 4. (Previously Presented) An optical connector according to claim 3, wherein the opening portion is filled with an adhesive, the fusion bonding portion being protected by the adhesive.

Claim 5. (Currently Amended) An optical connector according to claim 1, wherein the second optical fiber comprises:

a long fiber portion having longitudinal ends;

a short fiber portion which is higher in breakage resistance than the long fiber portion of the second optical fiber and has longitudinal ends; and

a fusion connection portion where one of the ~~long~~longitudinal ends of the short fiber portion of the second optical fiber is fused to one of the longitudinal ends of the long fiber portion of the second optical fiber, another of the longitudinal ends of the short fiber portion of the second optical fiber being exposed to serve as the exposed longitudinal end of the second optical fiber.

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Claim 6. (Original) An optical connector according to claim 5, wherein the connected state is accompanied with bending of at least one of the short fiber portions of the first and the second optical fibers.

Claim 7. (Original) An optical connector according to claim 5, wherein the second connector element has a main body, a clamp portion holding the second optical fiber, and a cover fixing the clamp portion to the main body.

Claim 8. (Currently Amended) An optical connector according to claim 7, wherein the clamp portion of the second connector element has an opening portion in which the fusion connection portion of the second optical fiber ~~being~~is disposed in the opening portion of the clamp portion of the second connector element.

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Claim 9. (Original) An optical connector according to claim 8, wherein the opening portion of the clamp portion of the second connector element is filled with an adhesive, the fusion connection portion of the second optical fiber being protected by the adhesive in the opening portion of the clamp portion of the second connector element.

Claim 10. (Original) An optical connector according to claim 1, further comprising an adapter for receiving the longitudinal ends of the first and the second optical fibers when the connection state is obtained.

Claim 11. (Canceled)

Claim 12. (Currently Amended) A connector element for connecting a connection object, and the connector element comprising:

an optical fiber; and

a clamp portion holding the optical fiber, the optical fiber including:

a long fiber portion having longitudinal ends; and

a short fiber portion connected to one of the longitudinal ends of the long fiber portion, wherein the short fiber portion has a polymer layer on its outer peripheral surface to have a high breakage resistance and flexibility, and the short fiber portion has a connecting end protruding from the clamp portion to be brought into contact with said connection object,

wherein a fusion connection portion is between the long fiber portion and the short fiber portion, which is held within the clamp portion, and

wherein the short fiber portion, which has a higher breakage resistance than the long fiber portion, is bent by the connection object in a connected state of the optical between the connector element and the connection object and is brought into contact with the connection object by the resilient force of the short fiber portion.